

### **REMARKS**

This Application has been carefully reviewed in light of the Office Action mailed September 20, 2005 ("Office Action"). At the time of the Office Action, Claims 1-52 were pending in the Application. The Examiner has rejected Claims 1-52. To advance prosecution of this case, Applicants amend Claims 1-6, 8, 11, 14, 17-18, 20-22, 26-27, 29-31, 33, 36, 39, 41-43, 45-52. Applicants do not admit that any amendments are necessary due to any prior art. Applicants respectfully request reconsideration and allowance of all pending Claims.

### **Declaration**

In the Office Action, the Examiner requests a corrected Declaration. Applicants submit herewith a corrected Declaration to conform with the Examiner's request.

### **Section 102 Rejections**

The Examiner rejects Claims 1-15, 21-40, 46, 47, and 49-52 under 35 U.S.C. 102(e) as being anticipated by U.S. Patent No. 6,192,404 B1 issued to Hurst, et al. ("*Hurst*"). Applicants respectfully request reconsideration and allowance of Claims 1-15, 21-40, 46, 47, and 49-52.

*Hurst* fails to teach, suggest, or disclose each element of amended Claim 1. In particular, *Hurst* fails to teach, suggest, or disclose "calculating a delay period based at least in part on a network address" as recited, in part, in amended Claim 1. *Hurst* discloses a network wherein a base node transmits queries to receiving nodes to determine time-to-live (TTL) distances between the base node and the receiving nodes. (*Hurst*; abstract; col. 3, ll. 15-41). In particular, the base node broadcasts multiple queries wherein each query is associated with a different TTL parameter value. (*Hurst*; col. 5, ll. 51-65). Upon receiving the first query from the base node, a receiving node waits for "a predetermined period of time" in order to receive other queries from the base node. (*Hurst*; col. 6, ll. 49-67; col. 7, ll. 1-47). After the predetermined period of time, the receiving node transmits a query response to the base node. (*Hurst*; col. 7, ll. 33-47). Notably, there is nothing that teaches, suggests, or discloses that the "predetermined period of time" in *Hurst* is "based at least in part on a network address" as is the "delay period" recited, in part, in amended Claim 1. In addition, there is no reference in *Hurst* to "calculating" the predetermined period of time. Thus, *Hurst* fails to teach, suggest, or disclose "calculating a delay period based at least in part on a

network address” as recited, in part, in amended Claim 1. Because *Hurst* fails to teach, suggest, or disclose this aspect of amended Claim 1, *Hurst* fails to support the rejection.

In rejecting Claims 6, 21, 26, 31, 46-47, and 49-52 the Examiner employs the same rationale used with respect to Claim 1. Accordingly, for at least the reasons stated with respect to amended Claim 1, Applicants respectfully request reconsideration and allowance of amended Claims 6, 21, 26, 31, 46-47, and 49-52.

Claims 7, 9-10, 12-13, 15, 23-25, 28, 32, 34-35, 37-38, and 40 and amended Claims 2-5, 8, 11, 14, 22, 27, 29-30, 33, 36, and 39 depend from independent claims shown above to be allowable. In addition, these claims recite further elements not taught, suggested, or disclosed by the cited references. For at least these reasons, Applicants respectfully request reconsideration and allowance of Claims 7, 9-10, 12-13, 15, 23-25, 28, 32, 34-35, 37-38, and 40 and amended Claims 2-5, 8, 11, 14, 22, 27, 29-30, 33, 36, and 39.

### **Section 103 Rejections**

The Examiner rejects Claims 16-20, 41-45, and 48 under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,192,404 B1 issued to Hurst, et al. (“*Hurst*”) in view of U.S. Patent No. 5,471,461 issued to Engdahl, et al. (“*Engdahl*”). Applicants respectfully request reconsideration and allowance of Claims 16-20, 41-45, and 48.

The *Hurst-Engdahl* combination fails to establish *prima facie* obviousness for at least two reasons. First, the proposed combination is improper because it would render *Hurst* unsatisfactory for its intended purpose. Second, the proposed combination fails to teach, suggest, or disclose “calculating a delay period to wait before responding to the query, the delay period based at least in part on a network address” as recited, in part, in amended Claim 16.

First, Applicants respectfully request that the Examiner withdraw the *Hurst-Engdahl* combination as improper. Applicants submit that the proposed combination would render *Hurst* unsatisfactory for its intended purpose. It is well established that if a “proposed modification would render the prior invention being modified unsatisfactory for its intended purpose, then there is no suggestion or motivation to make the proposed modification.” MPEP § 2143.01. *Hurst* discloses a network wherein a base node transmits multiple queries to receiving nodes to determine time-to-live (TTL) distances between the base node and the receiving nodes. (*Hurst*; abstract; col. 3, ll. 15-41). An intended purpose of *Hurst* is to

determine TTL distances of receiving nodes in a short, defined amount of time -- namely, “in the amount of time required for a message to travel to the furthest node of the computer network and for a return message to be received by the base node from the furthest node of the computer network.” (*Hurst*; col. 3, ll. 36-41). To achieve this purpose, *Hurst* teaches that the base node can concurrently transmit large numbers of messages. (*Hurst*; col. 3, ll. 34-41; col. 9, ll. 25-28, 44-50). Specifically, *Hurst* states that the precise determination of TTL distances “can require sending a large number of multicast messages concurrently. For example, if the TTL parameter of each multicast message can have any of 255 different values and maximum precision is desired, 255 separate multicast messages are sent concurrently.” (*Hurst*; col. 9, ll. 45-50). Thus, *Hurst* describes a base node that determines TTL distances in a short, defined timeframe by concurrently transmitting large numbers of queries to receiving nodes.

In contrast to *Hurst*, the system described in *Engdahl* hinders the ability of a node to concurrently transmit large numbers of queries. *Engdahl* discloses a moderator node that transmits to recipient nodes a control message. (*Engdahl*; abstract; col. 3, ll. 32-39). The network in *Engdahl* is based on a “time division multiplexed” protocol. (*Engdahl*; col. 5, ll. 9-16, 48-51). As a result, each node in the network is assigned a short, periodic time interval -- or media access control (MAC) frame -- for transmitting messages. (*Engdahl*; col. 5, ll. 28-51). *Engdahl* specifically teaches that a MAC frame has “a maximum length of 517 bytes.” (*Engdahl*; col. 5, ll. 28-51). If a node has more messages to transmit “than can fit within one MAC frame, the remaining ones *have to wait* until the node again is granted access to the network medium.” (*Engdahl*; col. 5, ll. 48-51) (emphasis added). Because of the limited length of the MAC frame, a node in *Engdahl* cannot *concurrently* transmit a large number of messages, such as the 255 messages taught in *Hurst*. (*Hurst*; col. 9, ll. 45-50). Modifying *Hurst* in view of *Engdahl* would result in system wherein the base node has only a single MAC frame for transmitting multiple queries to receiving nodes. As a result, the base node would be unable to *concurrently* transmit the large number of queries required in *Hurst*. (*Hurst*; col. 9, ll. 45-50). If the base node were required to wait for another turn to transmit the remaining queries, the base node would be unable to achieve its intended purpose -- namely, to determine TTL distances “in the amount of time required for a message to travel to the furthest node of the computer network and for a return message to be received by the base node from the furthest node of the computer network.” (*Hurst*; col. 3, ll. 36-41).

Because the proposed combination renders *Hurst* unsatisfactory for its intended purpose, the proposed combination is improper. Accordingly, Applicants respectfully request that the Examiner withdraw the *Hurst-Engdahl* combination.

Even if the improper combination is not withdrawn, the cited references fail to teach, suggest, or disclose “calculating a delay period to wait before responding to the query, the delay period based at least in part on a network address” as recited, in part, in amended Claim 16. The Examiner relies on *Engdahl* for this aspect of amended Claim 16. The portion of *Engdahl* cited by the Examiner discloses a process whereby network nodes may “determine the lowest network address being used by an active node.” (*Engdahl*; col. 14, ll. 20-22). *Engdahl* teaches that this determination process occurs “for a sufficiently long period of time that all active nodes will have an opportunity to have sent a message over the network.” (*Engdahl*; col. 3, ll. 49-51). However, the fact that the determination process in *Engdahl* occurs “for a sufficiently long period of time” has nothing to do with “calculating a delay period to wait before responding to the query, the delay period based at least in part on a network address” as recited, in part, in amended Claim 16. Notably, there is nothing in *Engdahl* that teaches, suggests, or discloses “calculating a delay period” as recited, in part, in amended Claim 16. Furthermore, there is nothing in *Engdahl* that teaches, suggests, or discloses a “delay period based at least in part on a network address” as recited, in part, in amended Claim 16. Because the cited references fail to teach, suggest, or disclose these aspects of amended Claim 16, the cited references fail to support the rejection. For at least these reasons, Applicants respectfully request reconsideration and allowance of amended Claim 16.

In rejecting Claims 41 and 48, the Examiner employs the same rationale used with respect to Claim 16. Accordingly, for at least the reasons stated with respect to amended Claim 16, Applicants respectfully request reconsideration and allowance of amended Claims 41 and 48.

Claims 19 and 44 and amended Claims 17-18, 20, 42-43, and 45 depend from independent claims shown above to be allowable. In addition, these claims recite further elements not taught, suggested, or disclosed by the cited references. For at least these reasons, Applicants respectfully request reconsideration and allowance of Claims 19 and 44 and amended Claims 17-18, 20, 42-43, and 45.

**CONCLUSION**

Applicants have made an earnest attempt to place this case in condition for allowance. For the foregoing reasons, and for other reasons clearly apparent, Applicants respectfully request full allowance of all pending claims.

If the Examiner feels that a telephone conference would advance prosecution of this Application in any manner, the Examiner is invited to contact Samir A. Bhavsar, Attorney for Applicants, at the Examiner's convenience at (214) 953-6581.

Applicants have attached hereto a separate Notification of Extension of Time for responding to the Office Action along with a check in the amount of **\$120.00** to satisfy the extension of time fee for one (1) month from December 20, 2005 to January 20, 2006.

Applicants believe no other fee is currently due. However, should there be a fee discrepancy, the Commissioner is hereby authorized to charge any fees or credit any overpayments to Deposit Account No. 02-0384 of Baker Botts L.L.P.

Respectfully submitted,

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**CORRESPONDENCE ADDRESS:**

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